**PRACTICE TEST**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Directions: Show all work so that anyone can follow along with your reasoning.

1. **Tell whether each statement is true or false, using T=True, F=False. If the statement is false, you do not need to correct the statement or provide a counterexample.** 
   1. The degree measure of an arc is equal to the measure of its central angle.
   2. The circumference of a circle divided by its diameter of that circle is .
   3. A radius is a segment connecting the center to any point of the circle.
   4. Two circles are congruent if they have the same circumference.
   5. The perpendicular bisectors of any chords in a circle will intersect at the circle’s center.
2. **Complete each sentence with the word that fits best.**
   1. Tangent segments to a point outside the circle are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   2. Any angle inscribed in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a right angle.
   3. A tangent to a circle is perpendicular to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ drawn to the point of tangency.
   4. The measure of an inscribed angle is half the measure of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   5. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angles of a quadrilateral inscribed in a circle are supplementary.
3. Given the diagram, find the following:

*X*

*Y*

*O*

*W*

*T*

*Z*

**.**

* 1. A tangent segment:
  2. A diameter:
  3. A chord:
  4. A central angle:
  5. An inscribed angle:
  6. A major arc:
  7. A semicircle:

1. Given *m*K=70, *m*200. Find *mD* and *mU*.



*mD*

*mU*

1. Given  are tangent to ☉O, BAD = 70, and.

Find the measures of  and *, BOD*, *BCD*, and *CBO*.

O

C

B

D

A

**.**

*m*=

*m*=

*mBOD* =

*mBCD* =

1. Given *m*=60, *m*80 *m*=130. Find *m*,*mM*, *mC*, *mMNG* and *mGIC*.



*m* =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*mM* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*mC* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*mMNG* = \_\_\_\_\_\_\_\_\_\_\_

*mGIC* = \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Given *r* = 24 meters. Find the length of *AT*. Leave your answers in terms of .

*B*

*A*

*T*

*r*

**.**

110**°**

**LENGTH** of *AT: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. Given Parallelogram *BERT* is inscribed in a circle with center *C*. The measure of minor arc = 120 and the length of . Find the **LENGTH** of in cm.

**LENGTH** of = cm.

1. ** The Library of Congress reading room has desks along arcs of concentric circles. An arc on the outermost circle with eight desks is about 12 meters long and makes up 1/9 of the circle.
   1. How far are these desks from the center of the circle?

*Use 3.14 for  and round to the nearest 0.01 meter.*

**Distance from the center:** meters

* 1. How many desks would fit along an arc with the same central angle but that is half as far from the center?

**# of desks that would fit:**  desks

*After you have found your answer to both questions, explain your approach and why your answer makes sense. You should use the words in the Word Bank to help make your explanation clear.*

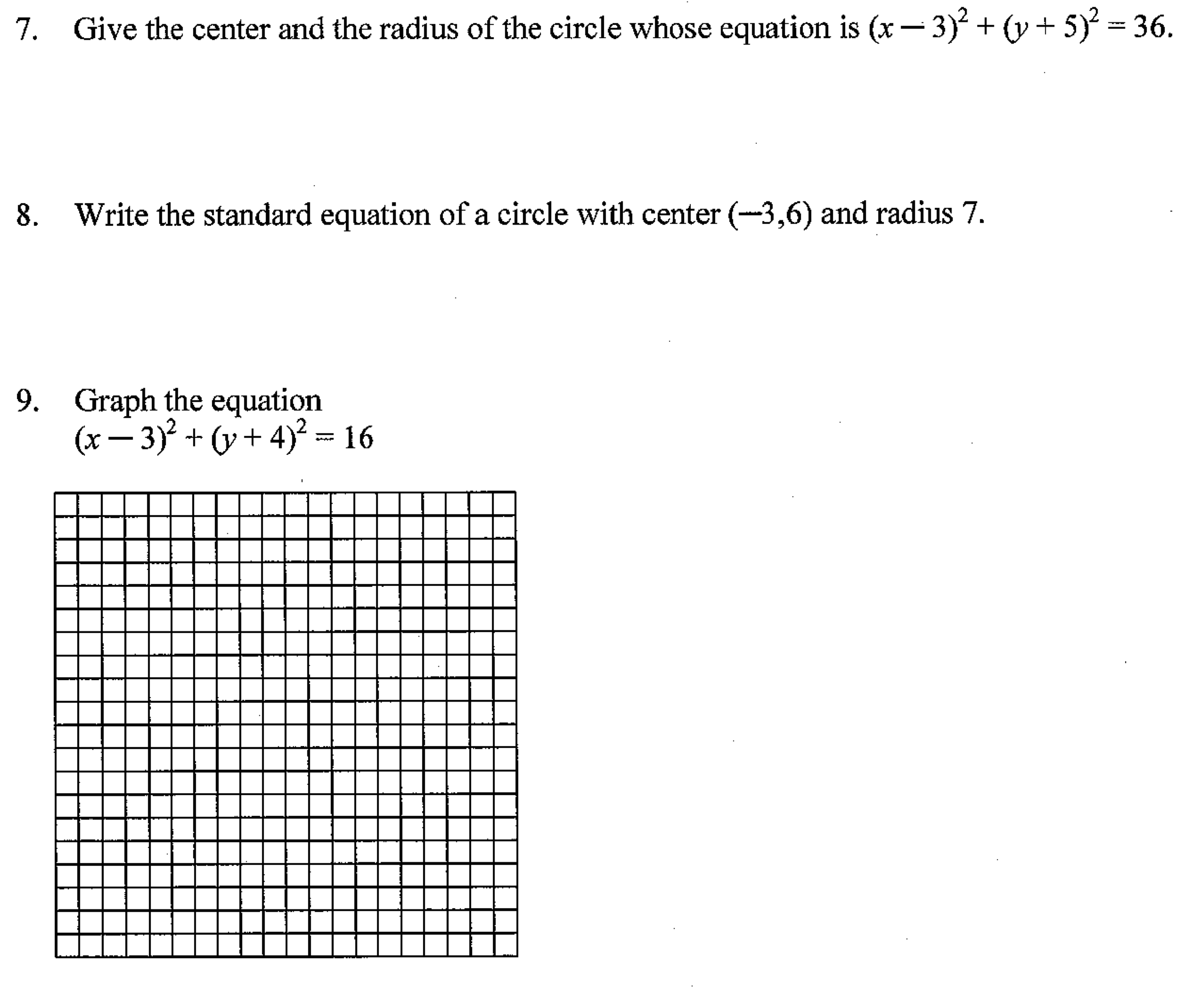
Corresponding Central Angle

Arc Measure Arc Length

Proportion Radius

Center Distance

Circumference



Determine the center and the radius:

